Unraveling the mysteries of high-energy cosmic rays using radio detection

Docters, Wendy

Stellingen behorende bij het proefschrift

Unraveling the mysteries of high-energy cosmic rays using radio detection

van

Wendy Docters

1. To investigate the radio signals from air showers, one should first spend time studying the influence of the surroundings and the impact of the electronics on the measurements before understanding the actual measurements.

2. The ratio of the radio signal strength measured at two different distances from the shower axis is a measure for the distance to the shower maximum, making the radio- detection technique sensitive to the composition of high-energy cosmic rays.

3. The use of the concept of shower universality in the field of air-shower physics is curious, since no two air showers are the same.

4. A Monte Carlo simulation code is only as good as your knowledge of the processes.

5. One should not be afraid to publish or discuss results that one does not fully understand or expect if one is sure that the experiment is correct, since the ensuing physics discussion furthers the field.

6. The thought of writing a computer script to find and possibly fix re-occurring flaws in your analysis usually comes when it has become redundant.

7. Propositions are the only way for the PhD candidate to show the readers that he or she is interested in things other than the subject of the thesis.